CLAIM AMENDMENTS

Claims 1 to 27 (canceled)

Claim 28 (Previously Presented)

An isolated nucleic acid specific to mycobacteria of M.tuberculosis complex having a nucleotide sequence selected from the group consisting of SEQ ID No: 1, SEQ ID No: 2, the complement of SEQ ID No: 1, and the complement of SEQ ID No: 2.

Claim 29 (Previously Presented)

An isolated nucleic acid specific to mycobacteria of M.tuberculosis complex having a nucleotide sequence selected from the group consisting of SEQ ID No: 1 and the complement of SEQ ID No: 1.

Claim 30 (Previously Presented)

An isolated nucleic acid specific to mycobacteria of M.tuberculosis complex which mycobacteria is different from BCG, whereas said nucleic acid has a nucleotide sequence selected from the group consisting of SEQ ID No: 2 and the complement of SEQ ID No: 2.

Claim 31 (Currently Amended)

A cloning or expression vector containing a nucleic acid sequence ~~of claim 28~~ selected from the group consisting of SEQ ID No: 1, SEQ ID No: 2, the complement of SEQ ID No: 1, and the complement of SEQ ID No: 2.

Claim 32 (previously presented)

A vector of claim 31 which is a plasmid selected from the group consisting of pRegX3Bc1 and pRegX3Mt1 deposited at CNCM under Nos. I-1765 and I-1766, respectively.

Claim 33 (Cancelled)

Claim 34 (currently amended)

A nucleotide probe or nucleotide primer of claim 33 comprising 24 consecutive nucleotides selected from a sequence selected from the group consisting of SEQ ID No:1, SEQ ID No: 2, the complement of SEQ ID No: 1, and the complement of SEQ ID No: 2.

Claim 35 (Previously Presented)

A nucleotide probe of claim 33 comprising sequence SEQ ID No: 1 or the complement of SEQ ID No: 1.

Claim 36 (previously presented)

A nucleotide probe of claim 33 comprising two successive sequences SEQ ID No: 1 followed by a sequence SEQ ID No: 2.

Claim 37 (currently amended)

A nucleotide probe for detection of specific sequences of nucleic acids of *M.tuberculosis* complex other than BCG wherein said probe ~~comprises~~ consists of a region of sequence SEQ ID No: 2 comprising the GAG codon in positions 40 to 42 or the complement of said region.

Claim 38 (currently amended)

A nucleotide probe for detection of specific sequences of nucleic acids of M. tuberculosis complex other than BCG ~~of claim 37~~ comprising a sequence composed of nucleotides in positions 31 to 51 of SEQ ID No: 2 or the complement of said sequence.

Claim 39 (Previously Presented)

A nucleotide probe of claim 37 comprising a sequence composed of nucleotides in positions 31 to 51 of SEQ ID NO: 2.

Claim 40 (Previously Presented)

A nucleotide probe of claim 37 comprising the sequence SEQ ID No: 2 or the complement of SEQ ID No: 2.

Claim 41 (previously presented)

A nucleotide probe of claim 33 labelled by dioxygenin.

Claim 42 (currently amended)

A nucleotide primer pair for amplification of a specific nucleotide sequence of mycobacteria of *M. tuberculosis* complex, wherein one primer consists of ~~comprises the~~ a nucleotide sequence of sequences adjacent to ~~the~~ a senX3-regX3 region in a ~~the~~ 3′ of senX3 region and the other primer consist of ~~comprises the~~ a nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 5′ of regX3 region.

Claim 43 (currently amended)

A nucleotide primer pair of claim 42 consisting of nucleotide primers comprising 19 nucleotides.

Claim 44 (previously presented)

A nucleotide primer pair of claim 42 comprising the pair of primers 5'GCGCGAGAGCCCGAACTGC3' (SEQ ID No: 4) and 5'GCGCAGCAGAAACGTCAGC3' (SEQ ID No: 5).

Claims 45 and 46 (canceled)

Claim 47 (currently amended)

A method of detecting a mycobacteria stain of M. tuberculosis complex in a biological sample comprising (1) contacting the biological sample to a pair of primers wherein one primer comprises a ~~the~~ nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 3' of senX3 region and the other primer comprises the nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 5' of regX3 region under conditions to effect hybridization of the primers to the specific nucleic acids of mycobacteria strains of *M. tuberculosis* complex,

(2) effecting amplification of the said nucleic acids,

(3) contacting the biological sample as a result of step (2) with a nucleotide probe that hybridizes at 68°C in a 5xSSC hybridization buffer with one of the sequences selected from the group consisting of SEQ ID No: 1, SEQ ID No: 2, the complement of SEQ ID No: 1, and the complement

of SEQ ID No: 2, their corresponding RNA sequences or their corresponding gene, and that contains a maximum of 21 base pairs under conditions for formation of hybridization complexes between the said probe and amplified sequences of nucleic acids and (4) detecting if any hybridization complexes are present, which complexes indicate the presence of a mycobacteria strain of *M. tuberculosis* complex.

Claim 48 (previously presented)

The method of claim 47 wherein the nucleotide probe comprises sequence SEQ ID No: 1 or the complement of SEQ ID No: 1.

Claim 49 (previously presented)

The method of claim 47 wherein the nucleotide probe comprises a region of SEQ ID No: 2 comprising the GAG codon in positions 40 to 42 or the complement of said region.

Claim 50 (previously presented)

The method of claim 49 effected upon immunodeficient humans to differentiate an infection by BCG from an infection by a virulent mycobacterium of M. tuberculosis complex.

Claim 51 (previously presented)

The method of claim 50 wherein the human is infected with HIV.

Claim 52 (Currently Amended)

A method of identifying groups of mycobacteria belonging to a *M. tuberculosis* complex comprising

(1) contacting the DNA of previously extracted strains of the M. tuberculosis complex with a pair of primers of claim[[s]] 35 ~~and~~ or claim 42 under conditions permitting a specific hybridization of the primers with one of the sequences of claim 28 to obtain amplification products and

(2) measuring the length of the amplification products obtained.

Claim 53 (previously presented)

The method of claim 52 wherein the pair of primers are 5'GCGCGAGAGCCCGAACTGC3' (SEQ ID No: 4) and 5'GCGCAGCAGAAACGTCAGC3' (SEQ ID No: 5).

Claim 54 (Currently Amended)

A kit for *in vitro* identification of strains of mycobacteria of the *M. tuberculosis* complex in a biological

sample comprising a primer pair for amplification of a specific nucleotide sequence of mycobacteria of *M. tuberculosis* complex, one primer consisting of ~~comprising~~ a ~~the~~ nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 3′ of senX3 region and the other primer consisting of ~~comprising the~~ a nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 5′ of regX3 region.

Claim 55 (currently amended)

A method of detection and of differential diagnosis of BCG and the members of *M. tuberculosis* complex in a biological complex comprising:

(1) contacting the biological sample to a nucleotide primer pair for amplification of a specific nucleotide sequence of mycobacteria of *M. tuberculosis* complex, one primer comprising a ~~the~~ nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 3′ of senX3 region and the other primer comprising a ~~the~~ nucleotide sequence of sequences adjacent to a ~~the~~ senX3-regX3 region in a ~~the~~ 5′ of regX3 region under conditions to effect hybridization of the primers to the specific nucleotide sequence ~~nucleic acids~~ of mycobacteria strains of *M. tuberculosis* complex;

(2) effecting amplification of the said nucleic acids;

(3) contacting the biological sample as a result of step (2) with a nucleotide probe of two successive sequences SEQ ID No: 1 followed by a sequence SEQ ID No: 2 under conditions for formation of hybridization complexes between the said probe and amplified sequences of nucleic acids;

(4) detecting any first hybridization complexes present; and

(5) determining if said first hybridization complexes are also capable of forming second hybridization complexes with a nucleotide probe for detection of specific sequences of nucleic acids of M. tuberculosis complex other than BCG comprising a ~~sequence of the~~ region of sequence SEQ ID No: 2 comprising the GAG codon in positions 40 to 42 or the complement of said region ~~its complementary strand~~, the presence of said second hybridization complexes being indicative of the presence of a *M. tuberculosis* strain different from BCG and the presence of said first hybridization complexes uniquely being indicative of the BCG.